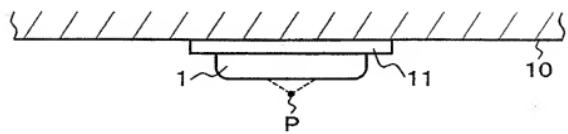
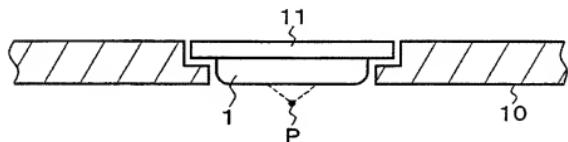


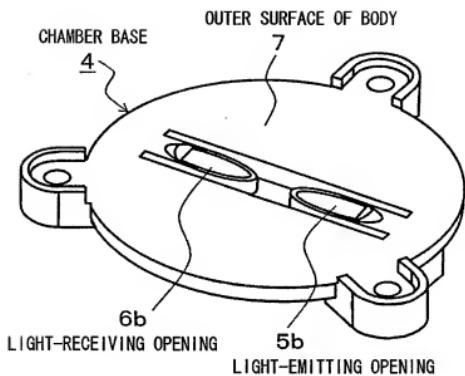
F I G . 2 A



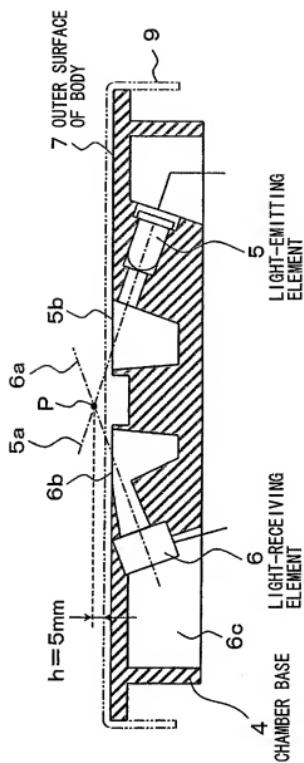
5

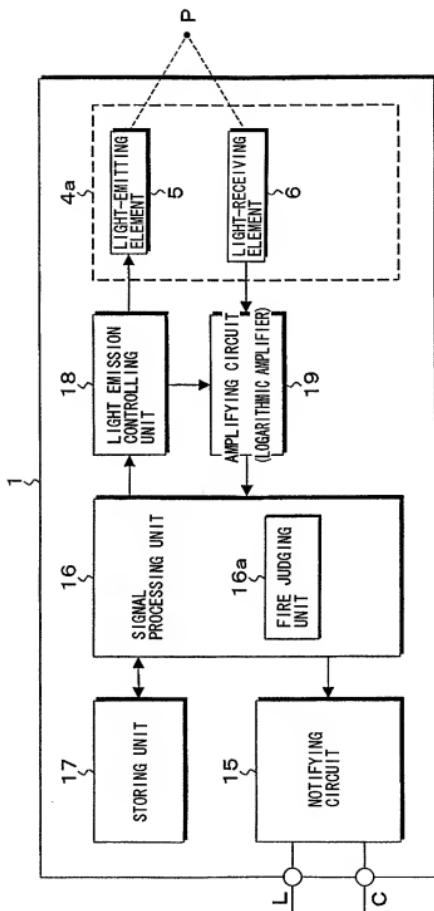
F I G . 2 B





F I G . 4





F I G . 6

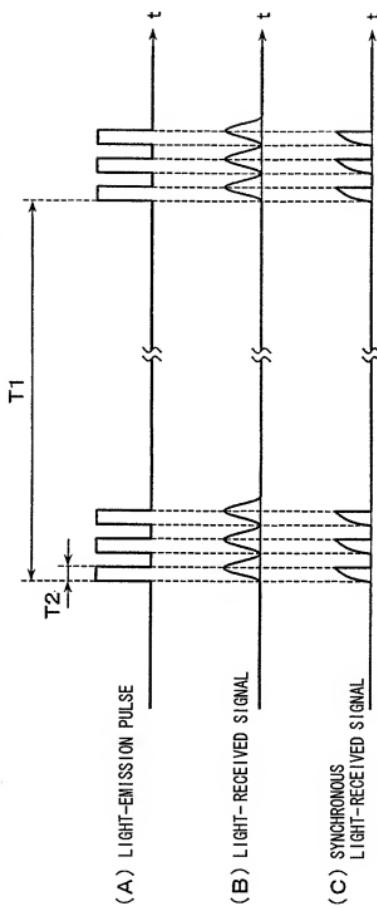


FIG. 7

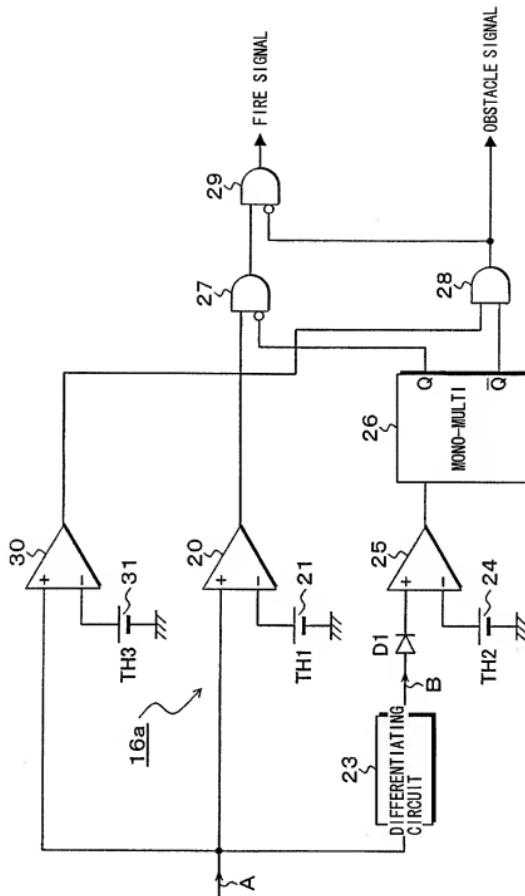


FIG. 8

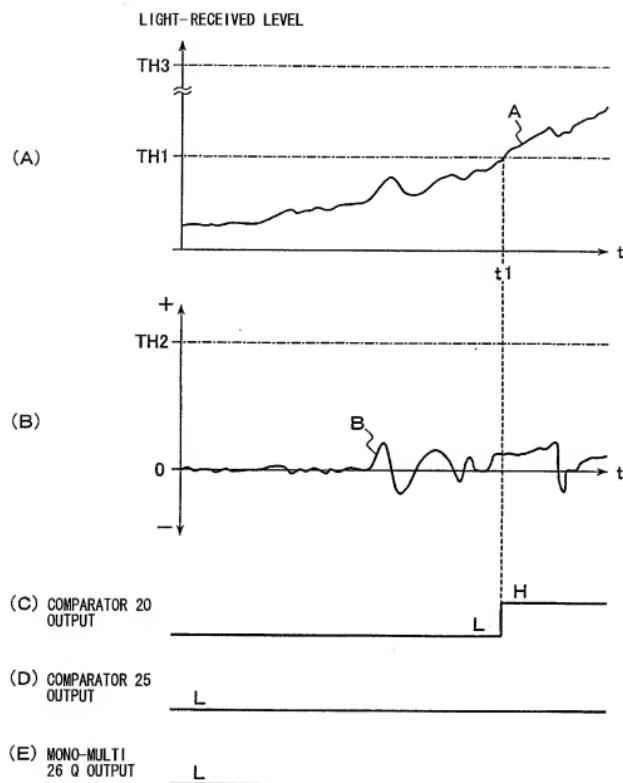
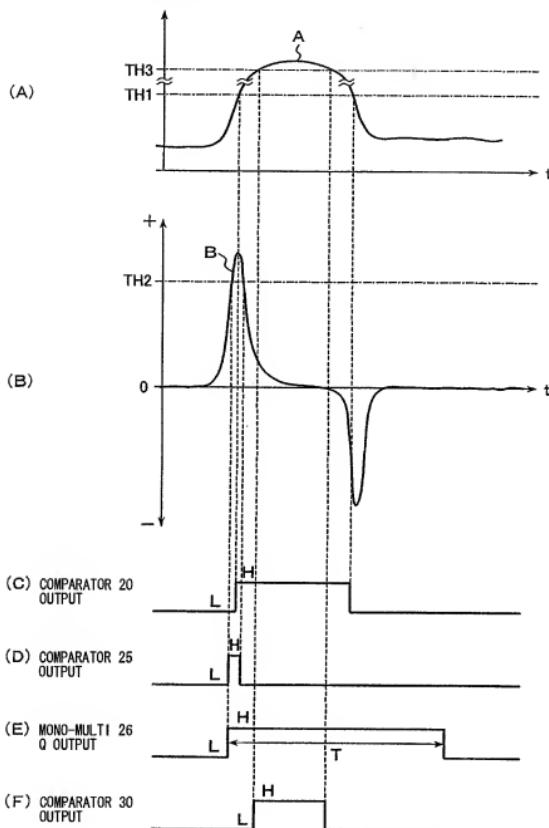


FIG. 9

LIGHT-RECEIVED LEVEL



F I G . 1 0

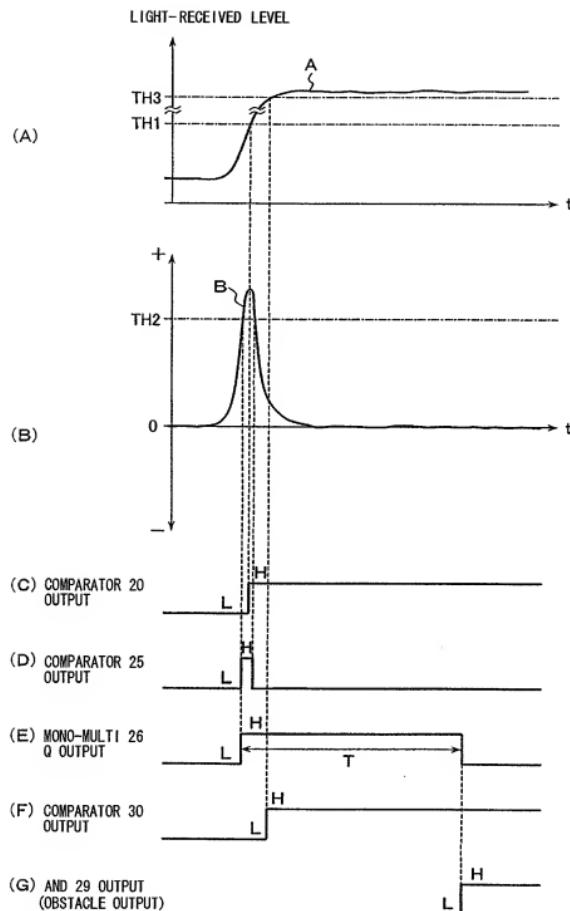


FIG. 11

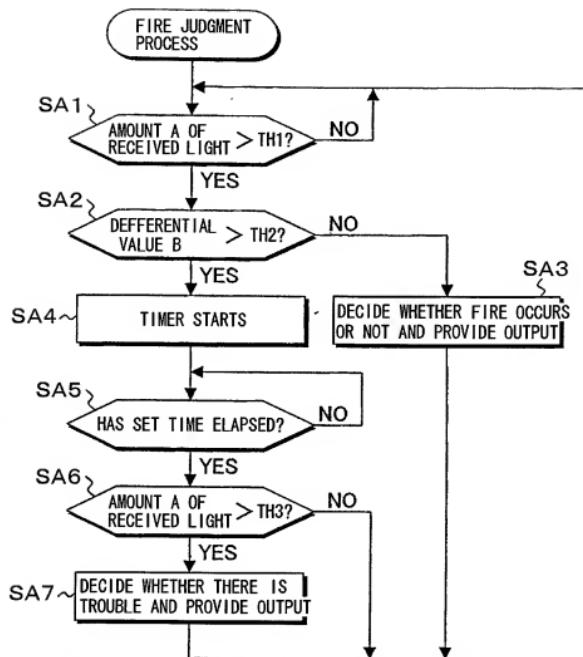


FIG. 12

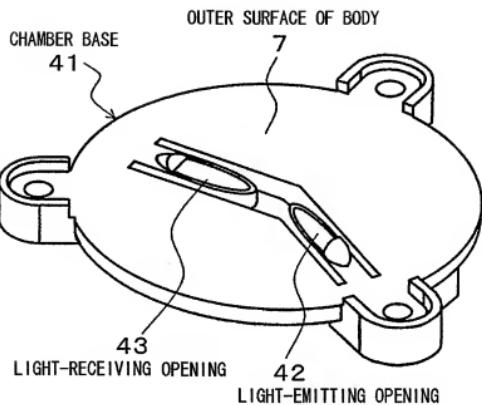
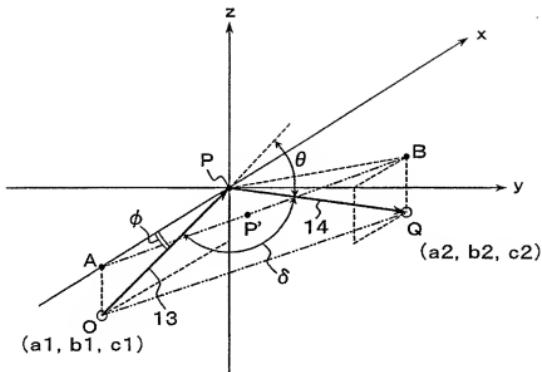


FIG. 13 A



5

FIG. 13 B

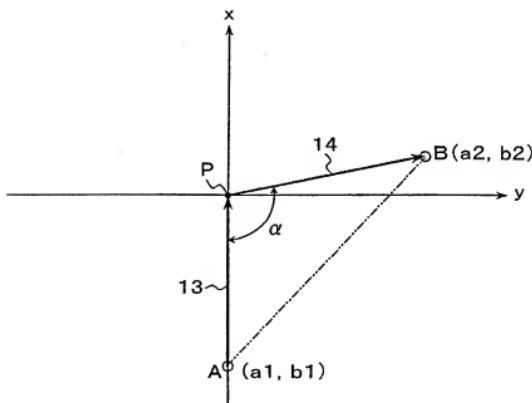
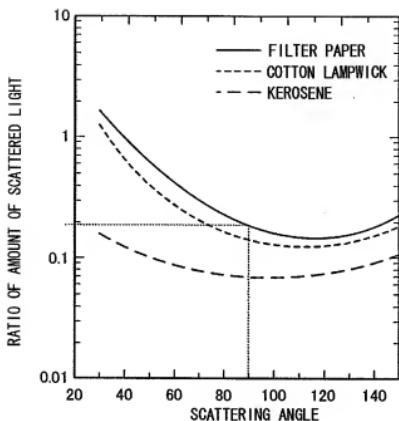


FIG. 14



5

FIG. 15

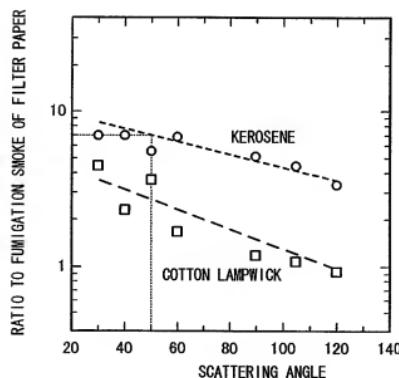


FIG. 16

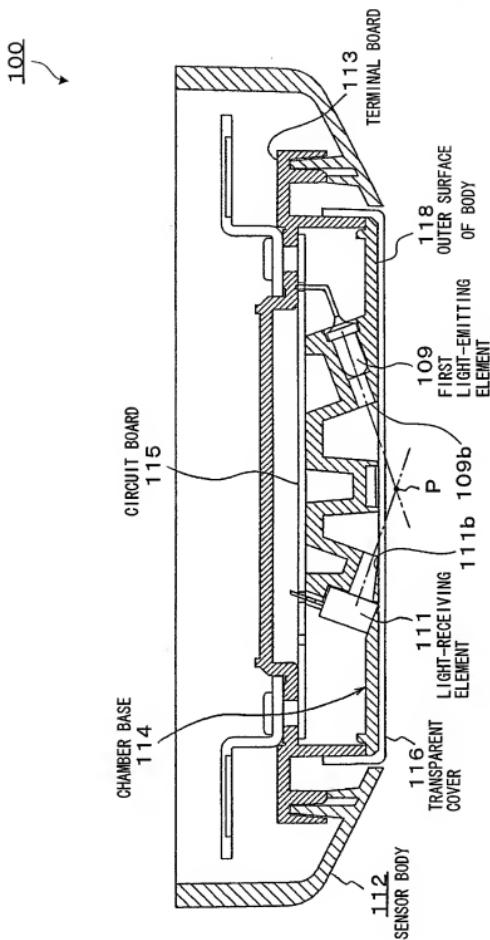


FIG. 17

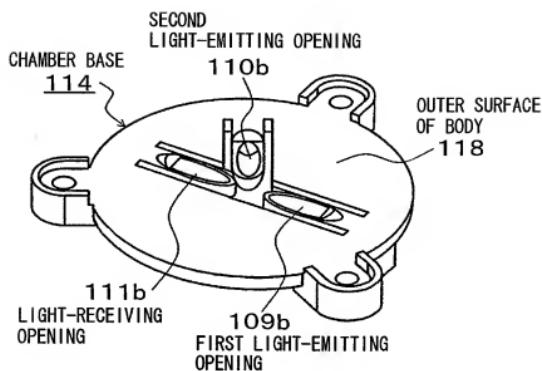


FIG. 18

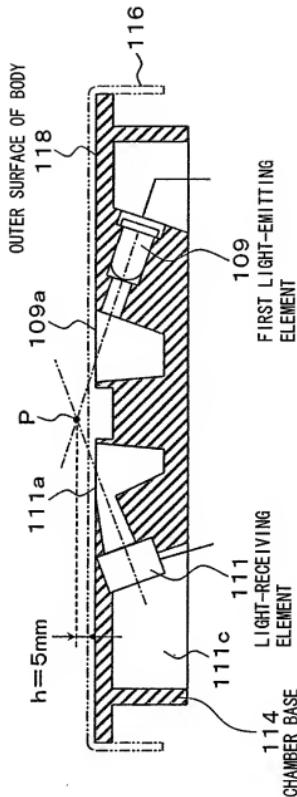


FIG. 19

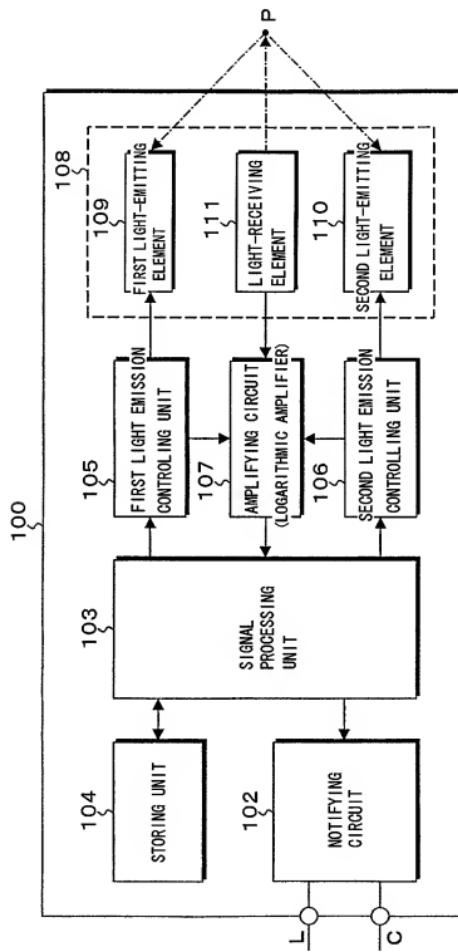
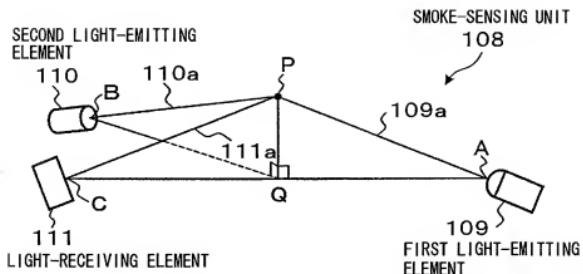


FIG. 20 A



5

FIG. 20 B

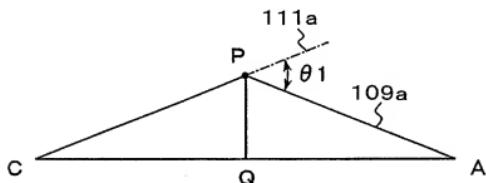


FIG. 20 C

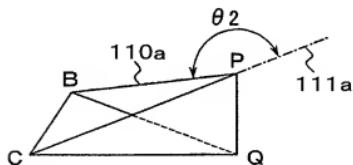


FIG. 21

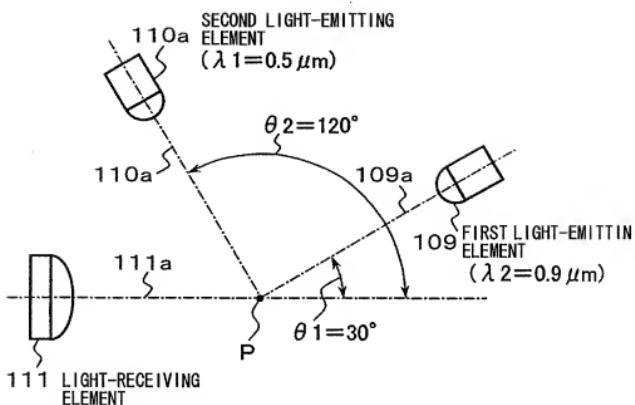
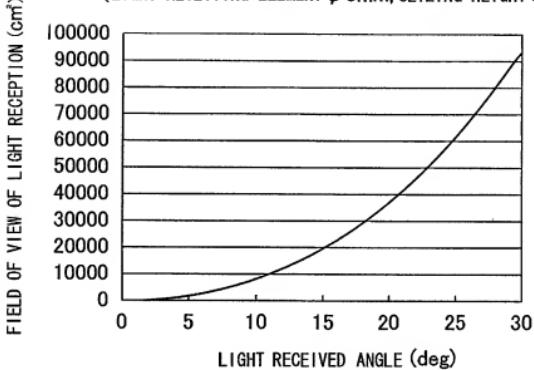


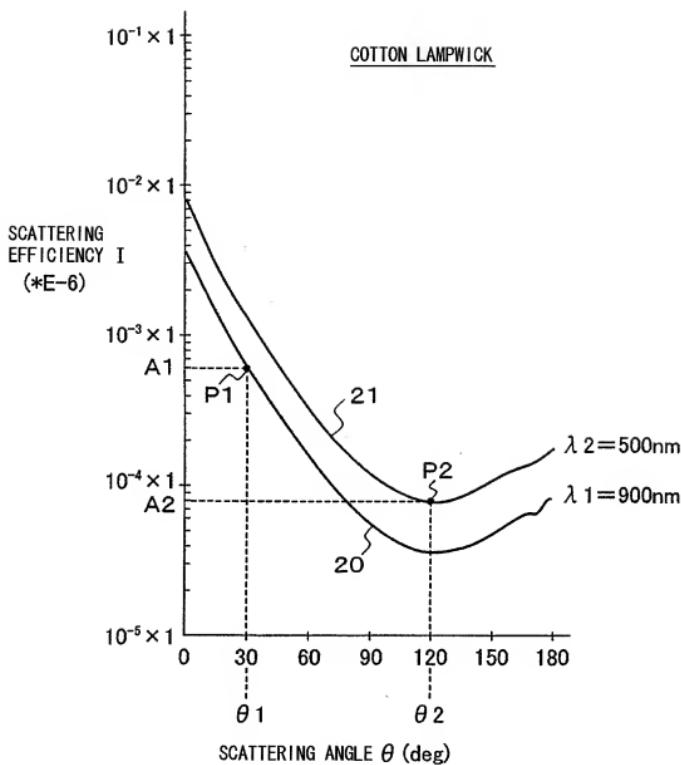
FIG. 22

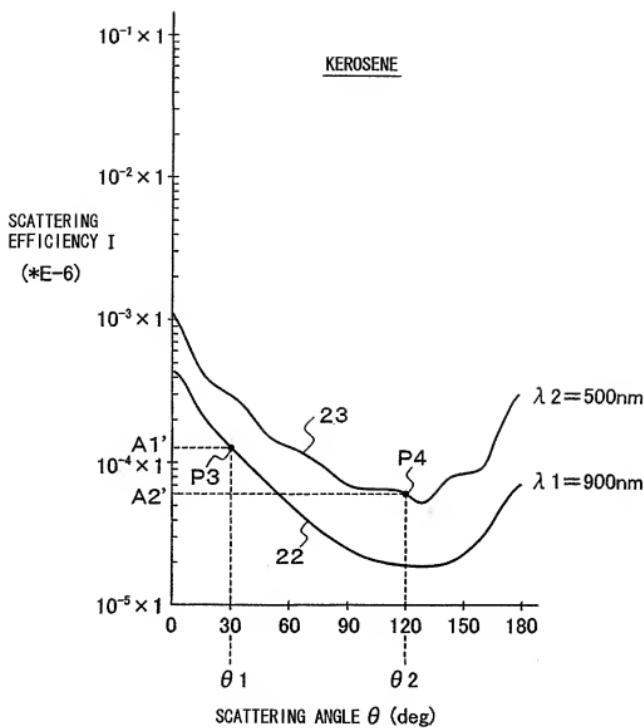
RELATION BETWEEN LIGHT- RECEIVED
ANGLE AND ANGLE OF FIELD OF VIEW

(LIGHT- RECEIVING ELEMENT ϕ 5mm, CEILING HEIGHT 3m)



F I G . 2 3





F I G . 2 5

TYPE OF COMBUSTION MATERIAL	AMOUNT OF LIGHT- RECEIVED SIGNAL A1 FOR FIRST LIGHT-EMITTING ELEMENT	AMOUNT OF LIGHT- RECEIVED SIGNAL A2 FOR SECOND LIGHT-EMITTING ELEMENT	RATIO $R = A1 / A2$
FUMIGATION SMOKE (COTTON LAMPWICK)	6.0E-04	7.5E-05	8.0
COMBUSTION SMOKE (KEROSENE)	1.2E-04	5.3E-05	2.3

FIG. 26

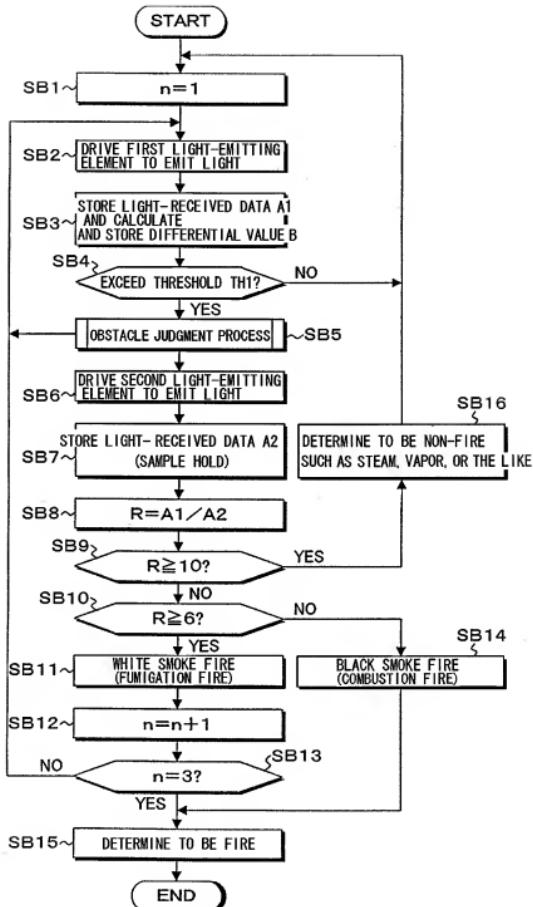
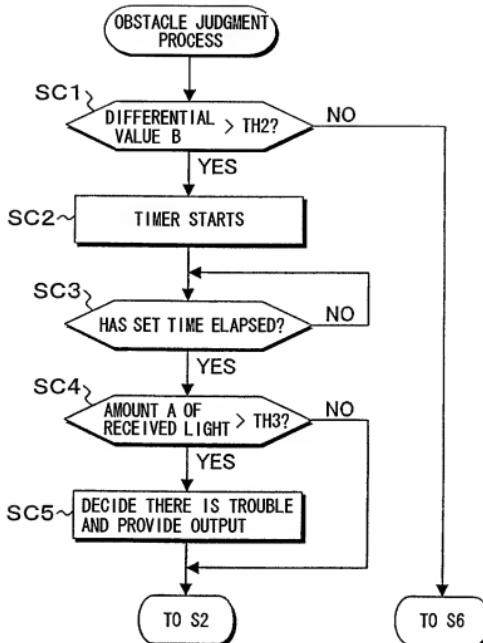


FIG. 27



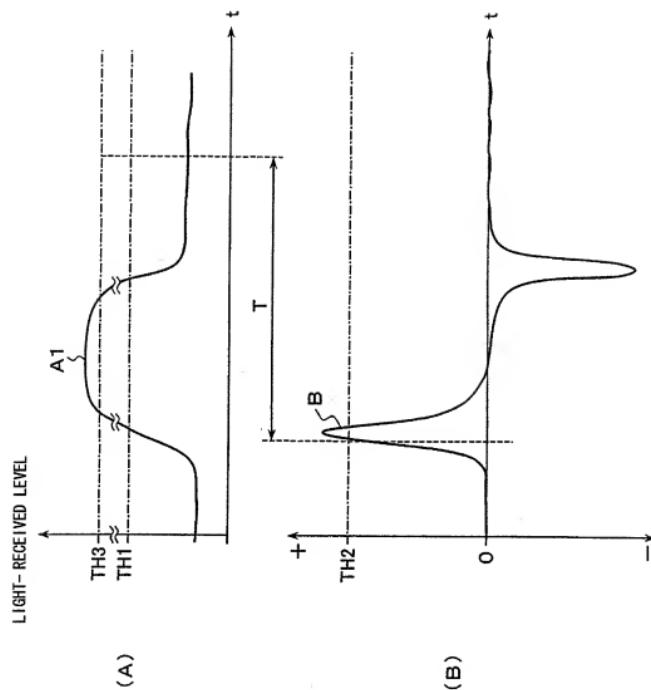
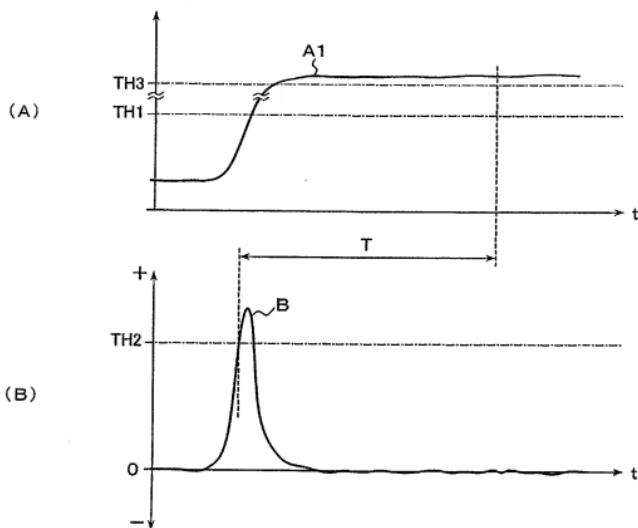


FIG. 29

LIGHT-RECEIVED LEVEL



F I G . 3 0

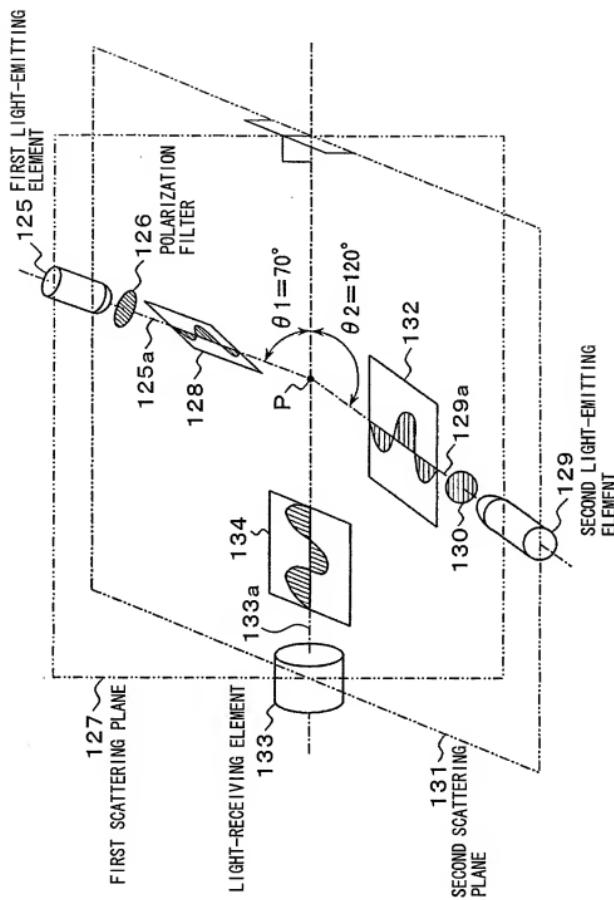
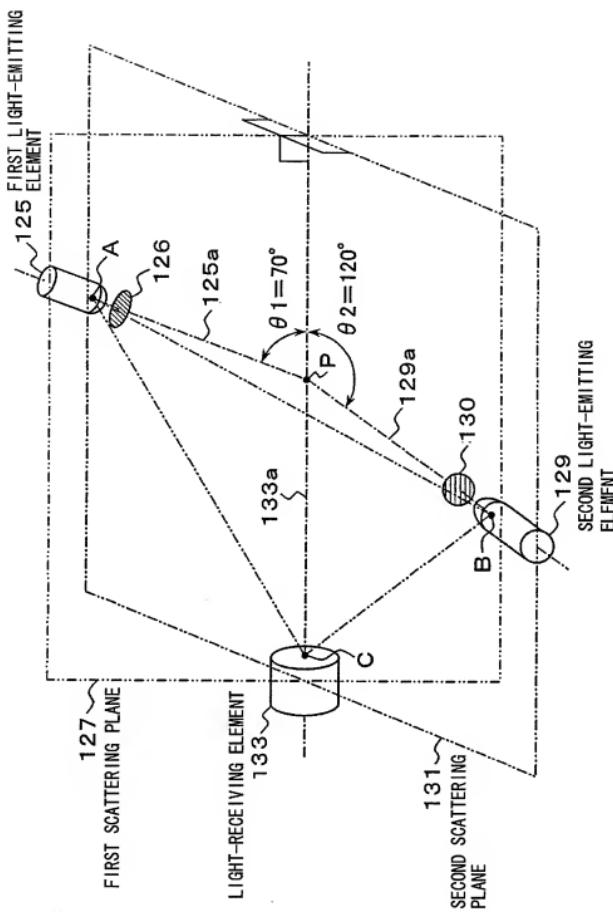
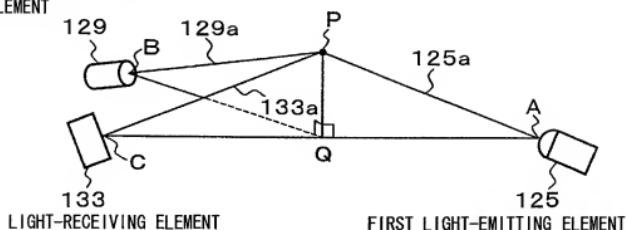


FIG. 31



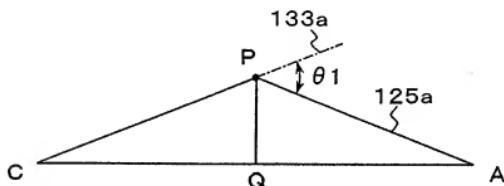
F I G . 3 2 A

SECOND LIGHT-EMITTING ELEMENT
ELEMENT



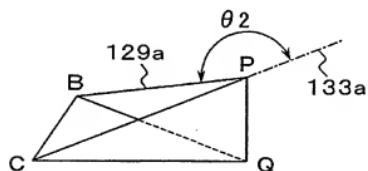
5

F I G . 3 2 B



10

F I G . 3 2 C



F I G . 3 3

SCATTERING ANGLE	70°		90°		120°		
	POLARIZATION ANGLE ϕ	0° (HORIZONTAL)	90° (VERTICAL)	0° (HORIZONTAL)	90° (VERTICAL)	0° (HORIZONTAL)	90° (VERTICAL)
PAPER FILTER	130	200	60	115	45	65	
KEROSENE	20	56	18	47	10	40	
TOBACCO	80	280	20	190	17	105	

TYPE OF COMBUSTION MATERIALS	AMOUNT A1 OF LIGHT- RECEIVED SIGNAL FOR FIRST LIGHT-EMITTING ELEMENT	AMOUNT A2 OF LIGHT- RECEIVED SIGNAL FOR SECOND LIGHT-EMITTING ELEMENT	RATIO R=A1/A2
PAPER FILTER	200	45	4.44
KEROSENE	56	10	5.60
TOBACCO	280	17	16.47

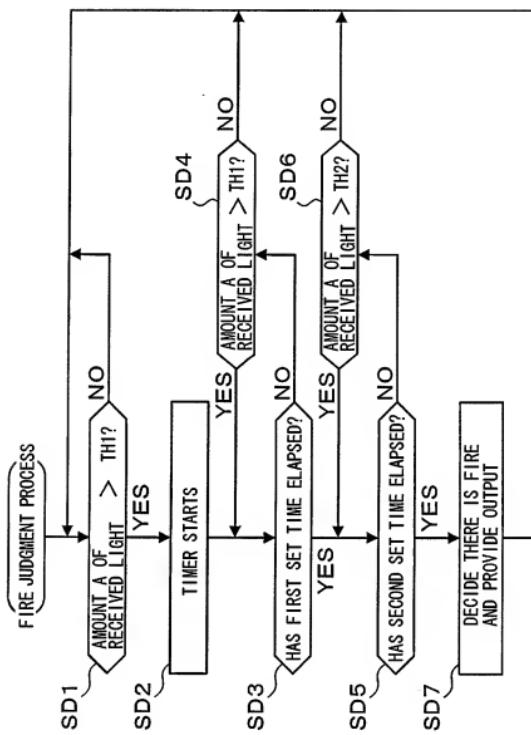
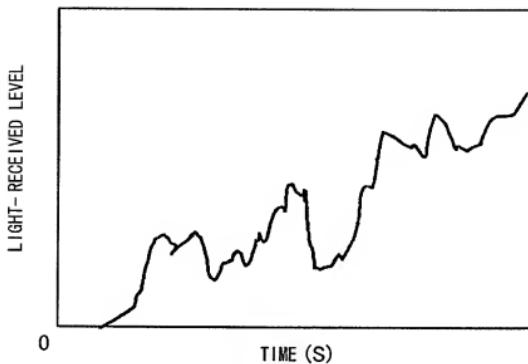
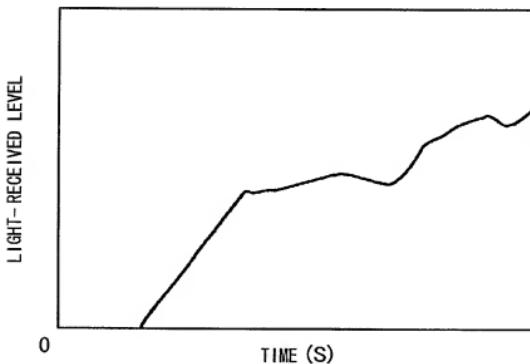


FIG. 36

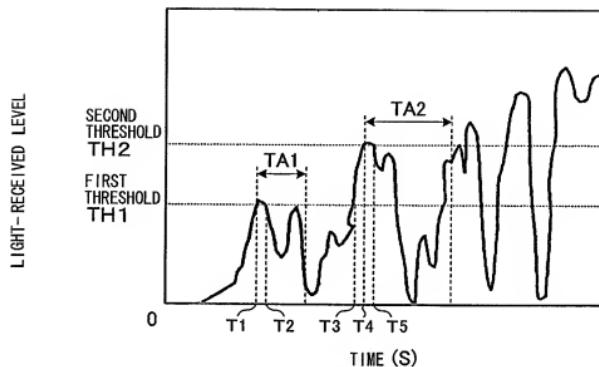


5

FIG. 37



F I G . 3 8



5

F I G . 3 9

